

AMERICAN VETERINARY REVIEW,

MAY, 1886.

EDITORIAL.

HENRY BOULEY—his death mourned by the entire veterinary world—a monument to be erected to his memory—every veterinarian and every veterinary society invited to subscribe—the American list open and started. PRIZE OF THE REVIEW—its requirements—only four months left to the competitor—why it was offered—the apathy of the veterinarians—the danger that threatened our elevation from it. TUBERCULOSIS IN THE UNITED STATES—the interest in contagious pleuro-pneumonia not as great as it was—tuberculosis takes the lead—its presence amongst our costly herd of registered Jerseys—now for legislation. HOG CHOLERA—wanted, a vaccine that can be used—is it the same disease as that of Europe—difference of opinion, still similarity of symptoms and of lesions. RABIES—wonderful results obtained in human prophylaxy—application of vaccination in the diagnosis of suspected animals—its great and essential use to the veterinarian—anxiety, life and money saved by it. GEORGE FLEMING—his election to honorary membership in an American veterinary society.

HENRY BOULEY.—There is a unanimity and an agreement in the comments of the veterinary press, touching the loss which the community and the profession have suffered in the death of our departed confrere, which is equally honorable to the writers and just to the memory and the merit of the illustrious deceased. The regret expressed, and the appreciation of his eminent qualities and brilliant public services, recorded by all who have referred to the subject, are universal, and are lacking in no element of earnestness and sincerity. As an evidence of this wide-spread and honorable feeling, we again bring to the notice of our readers the movement now in progress having in view the erection of a suitable monumental memorial, by the veterinarians

of France, in conjunction with those of Europe at large and the United States as well, and to which every true veterinarian, wherever residing, will, no doubt, consider it a pleasure, if not a duty, to contribute. We have not failed to add our voice to the verdict which has been so harmoniously rendered upon the character and achievements of our beloved friend, and which assigns to him the distinction of holding the chief place in the foremost rank of the profession, and we consider it an honor to be able to render such aid as we may in forwarding so commendable a project. This we propose to do by co-operating with the French committee having in charge the application of the amounts collected for the construction of the monument, and it will give us great pleasure to be made the agents of our professional friends in this country, in forwarding their subscriptions to the committee in Paris. We have already a small amount in our hands, devoted to the object in view—some twenty dollars—and we hope no delay will occur in making up a sum which will be honorable to our national repute for liberality and promptness in a good work.

The authors of the project have shown excellent judgment in the selection of a site for the contemplated memorial, by fixing upon the grounds at Alfort for its erection. It is the scene of his noblest achievements, and the spot where he first manifested and developed the greatness of his genius and established his claim to be enrolled as the first among the veterinarians of his time. No fitter place could be devised at which to plant the "counterfeit presentment" of one who was for so long a time a living inspiration and power, on the very spot where he was, while alive, the presiding and directing genius.

The "REVIEW PRIZE."—At the last September (1885) meeting of the United States Medical Veterinary Association, by way of giving an evidence of our desire to aid in giving an impulse and adding to the inducements to study and investigation in the ranks of our profession, we tendered the offer of an annual prize additional, and of similar value to that already provided by the Association. Our offer was for the best original paper on any subject within the scope of inquiry in veterinary science or prac-

tice, and the competitor is ever degree already stated any others wh papers present VIEW, and the Veterinary M ing, the vote knowledge o signature, but of each autho on the outside identified.

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tice, and the conditions attached to the offer are such that every competitor is sure to obtain at least the fullest publicity and whatever degree of resulting credit his work may merit. We have already stated these terms, but for the benefit of new readers and any others who may become interested, we repeat them here. The papers presented for competition are to be published in the REVIEW, and the prize is to be awarded by a vote of the United States Veterinary Medical Association, at the coming September meeting, the vote being taken upon the papers alone, without any knowledge of the authorship. The papers are to be without signature, but must be distinguished by a motto, and the name of each author must be enclosed in an envelope, which must bear on the outside the same motto by which his composition is to be identified.

The brief period of four months only now remains until the meeting at which this matter is to be determined, and—shall we say it—the first competitive paper has not yet come into our hands!

We scarcely care to refer to the pecuniary value of this prize which no one, so far, seems to covet, though even this might sometimes justify a few hours of thought and labor, but when we refer to other and nobler considerations, and the motives of a commendable ambition which no one seems to possess, what can be said? If the veterinary profession in America is to carry with it the prestige which properly belongs to it; if its members are to be men who can maintain a social equality with those who practice callings in no sense more respectable; if American veterinarians are unwilling to merit the stigma of inferiority, and to feel themselves incapable of fraternizing upon equal terms with the members of the same profession in European countries; if American science in this line of study is not to be *nil* as an originator, but is to borrow or beg all its advancement and growth from abroad—then, the more's the pity, let us sit humbly down and work our way with the minimum of knowledge, modestly plying the trade of doctoring horses and cows, for a moderate living, and leaving it to other lands to boast of their Bouleys, their Pasteurs, their Flemings, and scores of that type of veterinarians. But

if pessimistic suggestions like these are to be accounted slanderous, absurd and unpatriotic, let us see the evidence. Let the embarrassment of the members of the Association, in voting on the papers not yet received, be founded on the fact that there is such a thoroughness of research, such a patience in the comparison of obscure phenomena, such acuteness of perception in detecting hidden niceties of lesion, such sagacities of diagnosis, and such infallibility of prognosis, in *all* the essays, not yet written, that every one shall be better than all the rest, and nothing less than a medal for each can satisfy the demands of impartial justice. Let this be so, and we will answer for all the medals thus earned.

Nous verrons—perhaps.

TUBERCULOSIS IN THE UNITED STATES.—The subject of contagious pleuro-pneumonia seems, at the present time, to have lost much of the interest with which, in former years, it was regarded. Probably the variety of the means and the vigor of the measures employed to oppose the ravages, and the prompt resort to the stamping out process on the appearance of any new outbreaks, with the fact that it seems to have proved itself to be quite amenable to the stringent and successful methods adopted by the State authorities and their official veterinarians—probably all these causes combined have had the effect of measurably removing the subject from public attention, and allaying the excitement and alarm formerly so prevalent. Another reason may probably be found in the existence of another bovine scourge, which appears to be prevailing throughout nearly every section of the country, and which, affecting as it mostly does, the more costly and valuable grades of animals, is likely to be attended with a more serious pecuniary loss than some of the other epidemic and infectious diseases have inflicted. We refer to tuberculosis, numerous invasions of which disease have recently been brought to public notice. Maine, Massachusetts, New York and New Jersey, besides other regions, are reported as having herds of tuberculous animals, amongst which are many of high value, including bulls and cows of the Jersey families. This is a disease which well merits the attention of the veterinary sanitarian, and when we

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consider the recent discussions and discoveries of its contagious powers, and recall the similarity existing between this and the same disease in man, the human sanitarian also will once again be obliged to acknowledge the importance of the link which unites the two medicines. More dangerous in itself probably, than contagious pleuro-pneumonia, it may also be found more difficult to suppress, and having so interesting a relation to the general health of the people, it demands more active and effective legislative action to keep it under control.

HOG CHOLERA.—If other diseases of our domestic animals are claiming the consideration of sanitarians and legislators for economic reasons on account of the losses they may inflict on the national wealth, as well as their disastrous effects upon the general health of the nation, what must be said of hog cholera, a disease which, it is acknowledged, costs the country hundreds of millions of dollars yearly? Our agricultural papers are full of prescriptions and advice on the subject, including both the prophylaxis and the cure, but the value of the suggestions so variously given, especially those of the preventive class, becomes but little apparent, or quite falls to the ground when it is considered that it *has been thoroughly and without doubt*, demonstrated that inoculation is the *only* reliable measure of prevention. It is true that before inoculation can be introduced into this country, we must have a definite and satisfactory answer to an important question furnished, from one source or another, and must settle the query, "what is hog cholera"—is it the same disease here with that which prevails in Europe? Veterinary authorities on this side of the Atlantic seem to disagree on this serious point. Is the rouget of France, the schweine-senche of Germany, and the pnenmo-enteritis of England, and the cholera of America one disease? If we are to accept what has been written by competent authors in all these various countries, there does not seem to be room for a doubt. The symptoms and the lesions of which we read descriptions by French, German, English and American authors, are almost literally the same. The reports of those who have seen it in these various countries contain no essential differences in their accounts of the different nationalities and of different breeds. Not-

withstanding this, however, statements of the opposite opinion have been made public, in a number of instances, as of course there will always be many minds among many men. We, who have seen it both in France and America, and some of our friends who have observed it in Germany and in the United States also, are in no doubt respecting their similarity, and are so strong in our consideration, that we cannot see any other way to recommend in the prophylaxy of this scourge of swine, than inoculation.

With this object in view, we would urgently recommend to those who may have facilities for working in that direction, to endeavor to find a true vaccine, which, if not Pasteur's, may at least satisfy us with the same results.

RABIES.—Of this disease, we have little to say that has not already appeared in print, in most of the medical and veterinary journals. In the results already secured by M. Pasteur, the new method has shown undeniable evidences of its superiority. Out of 385 persons bitten by mad dogs up to the first of March, who were subjected to the treatment, one only had died with hydrophobia. It was a case in which the patient had received numerous and deep wounds, only thirty-seven days previous to the first inoculation. Over 200 of the patients had been bitten more than two months previously, or beyond the ordinary limit of the incubation of the disease. If then, it is shown by the most attainable statistics, that the average death rate in man is one in six of those bitten, we become able to appreciate the number of persons saved from one of the most horrible deaths that can be imagined. As Pasteur, says, "The prophylaxy of rabies is found."* Grand as the result is, it probably does not interest the veterinarian, as a veterinarian, as much as the other appreciation of which it is susceptible in our practice. The manipulations and the various methods of proceedings followed by M. Pasteur, while seeking for the virus, have brought to the attention of the practitioners an important fact, by disclosing the simple means which are now at his disposal of determining, in the case of an animal which had been killed after he has bitten other animals or persons, whether he was

* Since this was written, intelligence has been received that two other persons have died from the disease, though submitted to the treatment. These were not counted in the number up to the 1st of March.

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laboring under the disease when he inflicted the wounds. This is certainly a point of great importance and significance. It signifies the prevention of untold suffering from harrowing suspense and anxiety, and in not a few cases, the preservation of life itself, from the shock of mortal fear. It means, moreover, the saving of money, and the risk and inconvenience of preventive medication.

Now that it is well known that the inoculation of the smallest particle of brain, or of the medulla oblongata, into the cranial cavity of another dog shortens the period of incubation to a few days only, it becomes the duty of the veterinarian to familiarize himself with this method of investigation, with a view to the public benefit and satisfaction from its knowledge. He can no longer satisfy himself with theories of vague lesions; of foreign substances in the stomach; of a concentrated bladder; or even of a congested pharynx, or a more or less correct lay history of the case. Inoculation is the only positive means by which he can decide whether the prophylaxy of Pasteur ought or ought not to be applied, or whether the persons bitten are or are not in danger.

FLEMING'S HONORARY MEMBERSHIP OF THE NEW JERSEY STATE VETERINARY SOCIETY.—It is surprising that the veterinary profession of America should have waited so long to do for Mr. G. Fleming that which the New Jersey State Veterinary Society did by an unanimous vote at their last meeting. In electing him to an honorary membership, the Society may claim to be the first on this side of the water to express towards our esteemed friend their appreciation of his work in behalf of our profession. In calling this the first incident of the kind, we believe that we are correct, although his name may be found on the roll of the United States Veterinary Medical Association, associated with that of our great departed Henry Bouley. We do not know that he ever received notice of his election, which occurred years ago; indeed, we are quite sure he never received it, for there is no record of his acknowledging the compliment—an omission of courtesy of which he would never have been guilty. The letter in which Mr. Lowe presented his name to the Faculty will be found on another page.

ORIGINAL ARTICLES.

DISEASES OF THE HEART IN DOMESTIC ANIMALS,
ESPECIALLY THE HORSE.

BY FR. BLAZEKOVIC.

(Translated by J. C. Meyer, Sr., V.S.)

Continued from page 5.

(C) INFLAMMATION OF THE INNER LINING OF THE HEART.

Endocarditis.—By the term endocarditis, an inflammation of the inner lining of the heart is understood. However, it must be taken into consideration that the endocardium has no vessels, hence an inflammation is possible, not of the endocardium itself, but of its directly underlying tissue only, which is supplied with vessels. Probably in consequence of insufficient attention, endocarditis among domestic animals has as yet very rarely been an object of diagnosis. In horses it is found complicated with other diseases, as inflammation of the lungs and pleurisy; but especially in acute constitutional diseases, as influenza, subacute anthrax and typhus, it is often found with astonishing exactness and precision of the symptoms. Endocarditis is artificially generated by large doses of digitalis. Dogs are prone to it.

At the outset endocarditis is characterized by a sudden weariness and dejection, violent inflammatory fever, with slight remission, high temperature, 38° to 40° C., a small, conspicuously quickened pulse, which may reach 90 to 120 beats, and does not correspond with the heart-beat. (Very often in constitutional diseases, anthrax, influenza, etc.) At the beginning the heart-beat is strong and vehement, and is distributed over a large space of the region of the heart. In increased effusion the valves of the heart become morbidly changed, and thereby are disturbed in their function; the pulse now gradually becomes smaller, intermittent, leaping, and upon approaching death it sometimes becomes tremulous in regular intervals. If a purulent exudation be the sequel of endocarditis, the last described condition is constant.

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During the first half of the disease, respiration is normal, but as the disease progresses the respiration becomes interrupted, short, accelerated, and toward the end of life it increases to excessive dyspnoea and danger of asphyxia, owing to haemostasia.

The physical signs are increased action of the heart and violent heart-beats, by which the walls of the chest are agitated. If pericarditis be present with exudation at the same time in the pericardium, a peculiar vibration is communicated to the hand. Percussion shows alterations only when the form and contents of the heart begin to change, owing to the setting in of the exudation. The greatness of the altered form also corresponds to the extension of the dullness.

It is also important to determine the cardiac sounds. At first partly louder or duller, apparently normal, these change during the course of disease according as the valves are irritated by the degree of inflammation and its products. The systolic murmurs are always stronger than those of the diastole, often a metallic sound is present, resulting from increased impulse of the heart. If the inflammation be concentrated to such places where a stronger current of blood circulates, the double murmur is perceptible, which in human medicine is regarded as characteristic of endocarditis. At places less exposed to the current of blood the sounds are weak or wanting altogether. Later we shall speak of those murmurs which are produced by changes of the valves.

A constant symptom in endocarditis is haemostasis in the orifices of the veins, in consequence of which secondary hyperaemic and disturbed nutrition in the liver, spleen, kidney, mucous membrane, etc. Infiltration of the extremities, with indications of dropsy, are prone to set in, in cases which have become chronic. Secondary processes of cyanotic redness, hemorrhages and thrombosis, are nearly always characteristic symptoms of endocarditis, which appear very readily in typhus and influenza.

Such affections as originate either as natural defects of formation, or as a result of pre-existing and still existing diseases of the heart, and gradually develop into a lingering and chronic disease, are enumerated under a third species of diseases of the heart. The continuance of these diseases is under

moderate, gentle, normal circumstances, not absolutely dangerous to the life of the animal; but upon the slightest provocation such conditions may become eminently threatening to the organism.

(a) Hypertrophy and expansion of the heart is, as the post-mortem examinations reveal, not unusual and often attains an astonishing size. The nature of the hypertrophy is scarcely ascertainable during life, though its presence can be proved with certainty. In all cases hypertrophy has as a result, difficult breathing, but when affected in a high degree, it may upon the slightest exertion increase to threatening asphyxia. It is one of those conditions which in the older literature was designated as "herzschlächtheit," and we know by the name "emphysema."

In the state of repose the pulsation is not very important; in moderate hypertrophy a stronger impulse is present. Generally emphysema of the lungs is developed at the same time. The number of such emphysematous horses is enormous, and met with especially in cities, among horses belonging to the poorer class, who are obliged to own vehicles to get a livelihood. When hypertrophy is developed the impulse becomes changed, the beat less dragging, as though an obstacle were present which has a checking effect upon the action of the heart. The heart's action is laborious, often indicated merely by an indefinite heaving, trembling and whirring; it can scarcely overcome its mass, as it were.

In momentary increased activity of the heart the movements are only weak and powerless. The pulse corresponds perfectly with this condition; with the number of beats it falls mostly below the normal, with longer intervals, is scarcely perceptible, weak and powerless. If defects of the heart are also present the pulse is often intermittent, or so indistinct that several pulsations are united into one. Generally a prominence of the jugular vein is noticeable; and in more violent action, even a pulsation of the same.

Percussion always gives an extended dullness of the region of the heart, which is particularly evident in dogs. On auscultation, at the outset normal, short, clearer sounds are heard as long as the dilatation of the ventricles is moderate, provided neither

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ostium nor valves are drawn into sympathy at the same time. As the expansion of the ventricle increases, its systole becomes very imperfect; the pressure of the thinned walls is powerless, therefore the first sound is weak and indistinct. This indistinctness of the first sounds is manifold, modified according to the deficiencies of the valves.

In a high degree of the affection, secondary appearances, consecutive diseases are constant as an invariable result of hypertrophy. Thus we find especially overfilling and expansion of the nervous system, hemorrhages in the brain, liver, spleen and the mucous membranes, as also hypertrophy of these organs and appearances of chronic affections.

Additional consecutive diseases are: hydrophical accumulation in the limbs, and swelling on the sheath; emphysema of the lungs; often oedema of the lungs as the cause of death. Expansion of the heart causes these appearances to be more prominent; at the same time recurring dyspnoë, anxiousness, etc., is often observed upon the slightest movement.

In mild attacks prognosis is not unfavorable. By care and sensible usage an animal may continue to live. (Bleeding in particular, is very beneficial for such patients.) But if the disease develops to the high degree already described, such consecutive diseases as hemorrhage in the brain, lungs, spleen and liver, dropsy, rupture, etc., may be expected.

(b) Atrophy of the heart is scarcely to be diagnosticated during life. To the present day fulcrums, which might enable us to identify atrophy specifically as heart affection, are wanting. Auscultation nor percussion can give the necessary information. Most likely the existence of partial atrophy might also be established, associated with the defects of the valves and expansion of the cavities of the heart with atrophic walls.

(c) Rupture and laceration of the heart might be added here as a consequence of the changed substance of the heart. Above all it is to be noted, that rupture of the heart can occur only in cases of abnormal changes of the substance of the heart. The symptoms manifest themselves very violently and are mostly of very short duration. Apparent fear of death, shrieking, stagger-

ing and sudden plunging, great difficult in breathing, irregular tumultuous beating of the heart, a small irregular pulse, are the only perceptible symptoms, which death soon conquers.

Ruptures of the muscle of the heart are accompanied by similar appearances, but they are of somewhat longer duration, because there the rupture is not so much the cause of death as the blood which suddenly flows into the pericardium with all force. The function of the heart becomes momentarily or gradually suspended according to the quantity of the inpouring blood.

Such alterations of the heart which occur in consequence of hypertrophy, as induration, fatty degeneration of special parts, aneurism, generally produce such appearances which coincide with those of hypertrophy, partly with and partly without perceptible deviation. But we will hardly be able to determine with certainty the kind of pathological disturbance we have to deal with in the given case. It will be difficult to find fulcrums for the especial diagnostic. It is sufficient if we can establish the existence of such an alteration in the heart, its nature being no matter of consequence for the time being, since we are unable during life to determine it.

Such pathological changes in the heart are wont to be associated with those general symptoms which are usually found in chronic diseases of the heart. Concomitant are various functional disturbances of greater or less moment, as also various consecutive diseases, which, upon superficial examination, are generally taken for the essential disease and treated as such, naturally without success, as the germs of the disease lying in the heart remain wholly disregarded.

Foreign bodies penetrating the substance of the heart in ruminants have, according to the nature of things, specific symptoms as a result. It is only so far possible to establish these as we have the complicated symptoms of a violent pericarditis and endocarditis before us. As soon as this is observed in ruminants, their immediate slaughter should be recommended; the post-mortem examination will then disclose the cause of the violent symptoms of the heart.

(To be continued.)

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PARTURIENT APOPLEXY.

Paper read before the Ohio State Veterinary Medical Association.

By W. F. DERR, V.S.

Continued from page 20.

DURATION AND COMPLICATIONS.

The duration of parturient apoplexy is brief. In most cases it terminates favorably or unfavorably in from twenty-four to forty-eight hours. I have seen cases where death took place in five hours from the first symptoms of illness, and, on the other hand, I have seen cases that were comatose twenty-four hours and made a good recovery. The complications are pneumonia and temporary paralysis. Pneumonia, which is due to the passage of foreign matter, either food or medicine, into the air passages during the time that there is entire loss of deglutition, or where tympanitic with eructations of gasses and feed. This is often the cause of death when the patient has recovered from parturient apoplexy.

PREVENTIVE TREATMENT.

When we see the great fatality of this disease, and we know the subjects thereof are deep milking cows in a more or less advanced stage of plethora, we have every reason to prevent the disease, if we possibly can, by paying strict attention to hygiene, particularly during the last three or four weeks of pregnancy, and immediately after parturition. They should be fed on soft and easily digested food, so as not to cause constipation, and to have plenty of exercise, and as the time draws near, if they are very plethoric, to be put on half rations, with a laxative dose of sulphate of magnesia a day or two before calving, and, if necessary, a dose right after the act, and then to be fed sparingly for three or four days afterwards. In this way parturient apoplexy is prevented to a great extent.

By some authorities bleeding is recommended, and at the same time doses of purgative medicine administered, but I think by diminishing the feed, and, if necessary, giving the cathartic medicine occasionally, the animal ought to be reduced enough to

prevent an attack. If the secretions of milk should come on before calving, I should have it withdrawn as often as necessary.

SYMPTOMS.

The animal, some time after calving, say from ten hours to three days, becomes restless, lifts her posterior limbs alternately, looks sluggish and drowsy, refuses her food, the horns are hot, the nose hot and dry, the urine scanty, bowels constipated and if moved at this time, the feces are hard, dry and lumpy; the milk is suppressed in quantity or entirely stopped; the pupils are dilated, the hind legs seem weak and are separated from each other a little; stands very uneasily upon them, and if the animal is now moved, she will fall by a doubling at her fetlocks, but half rises again and so on until she sinks altogether and frequently bellows at her own inability to stand. About this period the disease makes a rapid progress, the animal plunges about in order to regain her feet, but the disease has taken a firm hold on her and she is unable to rise. She may now lay with her head pressed to her side, or she may lay tranquilly on her side fully extended. The rumen now becomes tympanitic from the suspension of its functions, the pulse becomes small, quick and almost imperceptible, her respiratory efforts are slow and infrequent, and after a little time becomes stertorous. The temperature taken at this time usually marks from 96° to 98° Far. This is the stage of the malady when the veterinary surgeon is usually sent for.

DIFFERENTIAL DIAGNOSIS.

This disease is frequently confounded with a disease known as loin fallen, the drop; technically, adynemia, nervosa generalis, or nervous debility, also with parturient fever, which is frequently treated for parturient apoplexy. But in the first named disease there is only a want of ability to rise with a tendency of coldness of the surface and weakness of the pulse, with some torpidity of the bowels; otherwise the animal remains apparently in good health. With the other, parturient fever, an increase of temperature of 102° to 103° is usually the first indication of the malady; a marked tumefaction of the vulva and a discharge therefrom of a dark chocolate color. As in parturient apoplexy, the cow may

maintain a prostration at the early stage

This disease authorities recommend some, every few pounds of other drugs. and makes ha if recovery s called in whi bleeding from of removing indicate stim blood flows th ness of the pu results of bra called in tim usually finds l

Medicinal to thirty drop the nervous s hydrate, or ch use carbonate stimulating er natural positio fixed to a be position; have rubbed, and th covered with the mammary cloth wrung o head cool, and and limbs; ha

maintain a recumbent position, but unlike the former, is due to prostration and not paralysis, and does not become comatose in the early stages as she does in parturient apoplexy.

CURATIVE TREATMENT.

This disease is treated in a good many different ways. Some authorities recommend, I think, powerful doses of medicine. By some, every half hour pint doses of whiskey or brandy, and at the same time a powerful dose of purgative medicine, as much as a few pounds of sulphate of magnesia dissolved with various other drugs. This is all to be added to several quarts of water, and makes half a bucket full, enough to nauseate the patient; and if recovery should take place, I think retard it. If I should be called in while the patient was on her feet, I should recommend bleeding from four to six quarts. The bleeding for the purpose of removing pressure from the brain, although the pulse may indicate stimulants rather than depletion. It will be found as blood flows that the tone of the pulse will improve, for the weakness of the pulsation and the debility of the heart's action are the results of brain pressure; but it is seldom the practitioner is called in time to relieve this brain pressure by bleeding. He usually finds her lying on her side.

Medicinally, I recommend about a pint of oil with from twenty to thirty drops oleum of tigli. If there is much excitement of the nervous system, I usually give half ounce doses of chloral hydrate, or chloral ether in one ounce doses. For a stimulant, I use carbonate ammonia in small and oft repeated doses. Apply stimulating embrocation to her spine, have her placed in her natural position, if necessary have a rope around her horns and fixed to a beam above in order to keep her head in a proper position; have her limbs and the whole surface of her body hand-rubbed, and then blankets thrown over the same, the whole to be covered with straw, all but her head; have the milk drawn and the mammary gland well hand-rubbed every few hours; apply cloth wrung out of ice cold water between her horns; keep the head cool, and have the blood sent to the surface of the body and limbs; have the patient turned every few hours, and at the

same time the milk drawn; also give an enema at this time; have the nurse remain with her day and night to see that she is kept in the proper position, for in no disease is there more careful nursing needed. If there is a perfect inability to deglutition, I administer medicine with a stomach pump. If tympanitis should be present, give bicarb. soda with caminatives, hyposulphate soda, etc.; have also used turpentine and ammonia with very good results, but should there not be prompt relief I puncture the rumen with trocar and canula. I sometimes leave the canula remain for the introduction of medicines and formation of gases. Should the animal be unable to rise to her feet after the disappearance of the disease, I administer grain doses of strychnine two or three times a day, with blisters to the spine. In some few³ cases I have had to use the actual cautery before the animals were able to rise to their feet. They usually can turn themselves at this time, but if not, have them turned three times during the twenty-four hours, a good bed kept under them and fed on easily digested food. I am no advocate of large doses of medicine, as I think they nauseate and retard recovery. In the treatment of this disease we must assist nature in relieving the congestion of the brain from the beginning of the attack. Stimulate the action of the skin, promote the action of the bowels, and also stimulate the functions of the mammary gland. All powerful and heroic treatment should be avoided, as well as large doses of medicine.

POST MORTEM.

The blood is dark in color and the veins distended, extravasation of the various serous membranes, blood extravasated over the brain, medulla oblongata and the cervical portion the spinal cord. The chief seat of the disease appears to be the brain. Here will not only be found congestion, but in some cases actual rupture of some of the vessels in that organ, showing the necessity of bleeding, if it could be done at the beginning of the disease.

SPRING SESSION OF THE A.V.C.—The spring session of the American Veterinary College closed on the 10th of April.

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By D. E. SAL
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ON A NEW METHOD OF PRODUCING IMMUNITY FROM CONTAGIOUS DISEASES.

By D. E. SALMON, D.V.M., AND THEOBALD SMITH, M.D. From the Proceedings of the Biological Society of Washington, Vol. III, 1884-'86.

More than four years ago* one of us, in the study of the subject of insusceptibility to contagious diseases, reached the conclusion that, in those diseases in which one attack protects from the effects of the contagion in the future, the germs of such maladies were only able to multiply in the body of the individual attacked because of a poisonous principle or substance which was produced during the multiplication of those germs. And also that, after being exposed for a certain time to the influence of this poison, the animal bioplasm was no longer sufficiently affected by it to produce that profound depression and modification of the vital activity which alone allowed the growth of the pathogenic germs and the consequent development of the processes of disease. After several series of experiments, made at that time with only negative results, it became necessary to suspend these investigations until points connected with them, and which were then obscure, should be cleared up, and until it should become possible to repeat the experiments under more favorable conditions. Our expectations in regard to this important subject have at last been realized by the results of experiments recently made in the laboratory of the Bureau of Animal Industry.

The bacterium, which we have lately discovered and which we believe to be the cause of swine plague, is killed in liquid cultures by an exposure to 58° C. for about ten minutes.

This method of destroying the bacterium in liquid cultures was resorted to in studying the effects on pigeons of the chemical products (ptomaines?) formed by the bacteria in their vegetative state, and which are probably dissolved in the culture liquid. The heated cultures used in these experiments were always tested by inoculating fresh tubes therefrom, and, if no growth followed this inoculation, the death of the microbes was considered established.

*Department of Agriculture, Annual Report, 1881-'82, pp. 290-295.

It has been previously determined that the subcutaneous injection of .75 cc. ($\frac{3}{4}$ dram) of a liquid culture of the swine plague bacterium containing 1% of peptone was invariably fatal, in the majority of pigeons within twenty-four hours. One half of this dose was fatal to a few only.

As a preliminary experiment, four pigeons were inoculated December 24, 1885, with a liquid culture that had been heated for two hours at 58°-60° C. Three of these (Nos. 10, 8, 9) received subcutaneously .4, .8, and 1.5 cc. of the heated culture, respectively. The fourth (No. 7) received 1.5 cc. of the pure culture liquid, into which no microbes had been introduced. No. 9, the one which had received the largest dose, was evidently sick the next day, but slowly recovered. The others did not show any symptoms of illness.

January 11, the one which had received a hypodermic injection of the simple culture liquid (No. 7), and the one which had received the largest dose of heated virus (No. 9), received subcutaneously about .75 cc. each of a liquid culture five days old, which had been prepared from a potato culture 15 days old. It is probable that this virus was not so strong, therefore, as a more recent culture from the pig would have been. Both pigeons were sick on the following day. No. 7 died seven days after inoculation. The bacterium of swine plague was found abundantly in the pectoral muscle, in the spleen, kidneys, and liver in moderate numbers.* The other pigeon (No. 9) slowly recovered, but had lost the use of its legs. It seemed perfectly well when killed, 15 days after inoculation. It was quite fat, the crop filled with food. In the pectorals were found imbedded two elongated masses of dead tissue or sequestra about 2 cm. long and 1 cm. in diameter, entirely separated from the surrounding tissue by a dense, smooth membrane. In this animal the multiplication of the pathogenic bacteria was purely local, the resistance of the

*In this animal the major part of both pectoral muscles appeared as if they had been boiled; they were whitish, bloodless; the fibres could be easily broken and crushed with the forceps. The muscular tissue surrounding the dead portion was very dark, gorged with blood. The liver was dark in patches spleen and kidney pale.

tissues being sufficiently powerful to confine, and finally destroy the bacteria. The sequestra were made up of dead muscular fibre, which was pale and parboiled in appearance. Each was enveloped by a more or less hyaline homogeneous layer. A liquid culture, inoculated with blood from the heart, remained sterile.

This experiment pointed evidently to an immunity obtained from the chemical products of the bacterium of swine plague. To confirm this view another experiment was made.

January 21, three pigeons (No. 11, 12, 13) received hypodermically 1.5 cc. of heated culture liquid in which the bacterium of swine plague had multiplied for two weeks, and was then destroyed by exposure to 58°–60° C. for several hours. A fourth pigeon (No. 14) was kept as a check. No. 10, which had received .4 cc. of heated virus Dec. 24, now received a second dose, this time of 1.5 cc. For the following three or four days all were somewhat ill, and remained rather quiet, with feathers slightly ruffled.

January 29, when all seemed well, three of the four (Nos. 10, 11, and 12) received hypodermically another dose of 1.5 cc. of heated culture liquid. The other (No. 13) had been fiercely attacked by its fellows, and its head was so injured that it was thought best not to give it an injection at this time, and it was placed in a spacious coop alone. None of the birds seemed much affected by this dose.

February 6, a final injection was practised upon the four, No. 13 having recovered from the effects of its injuries. The dose was, as before, 1.5 cc. All seemed well a few days later.

February 13, one week after the last injection, these birds were inoculated with strong virus, the quantity injected being .75 cc., which had hitherto proved invariably fatal, with the single exception of the bird that had been previously treated with heated virus. Those inoculated were Nos. 10, 11, 12, 13, which had received the heated virus, also No. 14, the check pigeon, which had not been touched, and No. 8, which had received a small quantity, .8 cc. of heated virus, December 24, over 50 days before.

On the following day the check pigeon (No. 14) was found dead; the one which had received the smaller dose (No. 8) was

very ill and died before the next day. The other pigeons were perfectly well. The effect of this dose of strong virus, so remarkable on the unprotected pigeons, was even more evanescent than that of the heated virus in which all life had been destroyed.

There can be no doubt, therefore, from this very positive result, that the pigeons had acquired an immunity through the effect upon the tissues of the chemical products formed by the bacterium in the culture liquid.

A table giving the dates of the injection and the quantity introduced into each animal is below:

Pigeons.	1885.	1886.				Total of Heated Virus.	Remarks.
	Dec. 24.	Jan. 21.	Jan. 29.	Feb. 6.	Feb. 13.		
	Heated Virus.	Heated Virus.	Heated Virus.	Heated Virus.	Strong Virus.		
	cc.	cc.	cc.	cc.	cc.	cc.	
No. 8....	.8	.....	.....	.....	.75	.8	Died in 48 hours after injection of strong virus.
" 10....	.4	1.5	1.5	1.5	.75	4.9	Well Feb. 20.
" 11....	.....	1.5	1.5	1.5	.75	4.5	Same.
" 12....	.....	1.5	1.5	1.5	.75	4.5	Same.
" 13....	.....	1.5	.....	1.5	.75	3.0	Same.
" 14....	.....	.....	.....	.....	.75	.....	Died in 24 hours after injection of strong virus.

In the birds that died, (Nos. 8 and 14), the pectoral muscles at the place of injection were pale and friable. Necrosis was already at hand. The internal organs were not macroscopically altered, excepting the spleen of No. 8, which was enlarged and dark. The presence of the bacterium of swine plague in the blood from the heart was demonstrated by liquid cultures, which, inoculated with a minimum quantity of blood, were turbid with this specific microbe on the following day.

The conclusions to be drawn from this experiment we believe are of superlative importance to a correct understanding of the phenomena of contagious diseases, and the methods by which these diseases are to be combatted. They probably apply to all bacterial plagues of men and animals in which one attack confers immunity from the effects of that particular virus in the future

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These conclusions are :

1. Immunity in the result of the exposure of the bioplasm of the animal body to the chemical products of the growth of the specific microbes which constitute the virus of contagious fevers

2. These particular chemical products are produced by the growth of the microbes in suitable culture liquids in the laboratory, as well as in the liquids and tissues of the body.

3. Immunity may be produced by introducing into the animal body such chemical products that have been produced in the laboratory.

TREATMENT OF SPRINGHALT BY SHOEING.

By MR. MONTAGNAO.

First Case.—A bay gelding, three years after his purchase, showed symptoms of springhalt, and about a year subsequently was brought to Mr. M. While at rest there was nothing in the appearance of his hind legs to attract attention, except a slight contraction of the feet at the quarters and the heels. This condition was about the same in both feet. The exploration of the feet produced no manifestation of unusual sensibility. The lateral cartilages, external as well as internal, were pressed on their superior border against the posterior face of the second phalanx, and seemed to have lost their suppleness and elasticity. When in motion, the animal exhibited the characteristic spasmodic movements of springhalt in an extreme degree, whether walking or trotting, and whether travelling in a straight line or in a circle.

Treatment.—The shoes having been removed, the feet were thoroughly pared, and kept for eight days in a poultice of clay. He was then shod with the "Watrin"* shoes, with directions to soak the feet for two hours daily and give him walking exercise. Renewed shoeing, as required, showed an improvement to such an extent, that after some six months of the treatment, the springhalt has almost entirely disappeared.

* The Watrin shoe has two little caulks on the inside of each branch of the shoe, close to the heels, upon which they rest, and which they spread.

Second Observation.—This patient was a bay gelding, eight years old, who had had springhalt since March, 1884. When he was seen in October of the same year, it was observed that while at rest, the heels were elevated and somewhat contracted. The cartilages had lost their elasticity, and were curved forward on their superior border. In action, the horse had well marked springhalt, principally in the left leg, the right seeming to be in a normal condition.

Treatment.—Both hind feet having been unshod and properly pared, the Watrin shoes were placed on them and the animal was returned to his work. A year after he was entirely free from springhalt; cure was complete and he moved naturally and easily.

Third Observation.—A gray mare, ten years old, had springhalt badly in both legs. She was seen in June, 1883, at which time her hind feet were elongated, her quarters depressed sideways, and her heels contracted. The median lacuna of the frog was gone, and the space filled with a sebaceous secretion of an offensive odor. The lateral cartilages were indurated and thicker than usual, their superior border resting on the posterior face of thesecond phalant. In action sudden springhalts in both legs was developed to such extent that the anterior face of the feet struck the flanks of the animal.

Treatment.—The shoes were removed and feet properly pared, and clay poultices directed for eight days, Watrin shoes and a bath and walking exercises were ordered, and a month afterward the animal was returned to work. She was lost sight of and not seen again until eighteen months had elapsed, when no alteration in the action could be detected; only the lesion of the median lacuna of the frog remained, for which proper treatment was directed.

DR. GEORGE FLEMING.

(By DR. WM. HERBERT LOWE, of Paterson, N. J., State Veterinary Inspector.

Gentlemen of the Veterinary Medical Association of New Jersey:

Permit me to ask your attention to a letter which, although it cannot be regarded as part of the correspondence of the society,

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being more or less personal, still it is my duty to make known to you some passages from its contents. The letter in question is from Dr. George Fleming of London in reply to one which I had occasion to address to him some time ago. Dr. Fleming says: "I greatly value the friendship and esteem of my good colleagues on the other side of the Atlantic," and in another place he says: "Give my heartiest good wishes to your worthy President, and to the members of your Association, and with renewed thanks and kind regards to yourself," etc., etc. These are kind and encouraging words. I especially value them for the *fraternal feeling* they express, and so 'heartily,' for the profession. You know that in our constitution and by-laws, great stress is laid on fraternal feeling. As you were pleased to confide to me the preparation of what is now known as the new constitution and by-laws, adopted since our incorporation under the Act of the Legislature for the promotion of veterinary science and art, I had the opportunity and took special pains to dwell upon the importance of the "promotion of fraternal feeling" as being almost paramount to the scientific intercourse and intellectual advancement which I trust may always mark the proceedings of the Veterinary Medical Association of New Jersey. Following out this sentiment of fraternal feeling, it would be proper for us, gentlemen, I think, to communicate to Dr. Fleming some expression of the regard in which he is held by the profession, not only in New Jersey, but all over our broad land.

In looking at Dr. Fleming's life, whether we travel with him, in imagination, as a young veterinary surgeon, through the Crimean war, China, Syria and elsewhere; or behold him, more recently, when he was offered by His Royal Highness the Duke of Cambridge, Field Marshal Commanding-in-Chief, the appointment of Principal Veterinary Surgeon to the British forces; or consider him as president of the Royal College of Veterinary Surgeons; or in presenting his successful plea for the Veterinary Surgeons' Act of Parliament; or as having the degree of Doctor of Laws conferred upon him by the University of Glasgow, in recognition of services rendered to human and animal medicine; or as honorary life member of scientific societies in all parts of

the civilized world—in whichsoever of these aspects he is considered, we at last turn anxiously to his books, and ponder over these legacies of his genius which “preserve, as in a vial, the purest efficacy and extraction of that living intellect that bred them.”

The profession is under great if not unspeakable, obligation to Dr. Fleming for having interpreted clearly and conscientiously, to the English speaking world, the immortal Chauveau, who “followed nature as a divinity.” A man of letters or of science only could not have done this successfully. Like our own Lian-tard, he has been a devoted student in all the departments of anatomy, and so extended and varied is his learning as to command the most sincere respect and admiration. To render Chauveau as Dr. Fleming did was a bold undertaking, but a great triumph. The anatomy of the domesticated animals, so indispensable to the veterinarian, and so fully as Chauveau gives it, called for a mind capable of surveying vast fields of research with general as well as special accuracy. Nothing short of exquisite precision in observation, and clearness of description of the minutest *essential* details, could meet the wants of the student. His patience and painstaking excite our admiration at every step. Whether in physiological anatomy, explaining the organs of health, or pathological anatomy, those of disease, or transcendental or philosophical anatomy, giving the analogies of organs, and showing the “simplicity of nature’s plan in the general laws of organization,” he aims, like Chauveau, for the simple truth, and the simple truth is always sublime.

Some time ago, when we heard of Dr. Fleming’s serious illness, not only were tender emotions awakened, but all felt what a great loss it would be if he were not spared to finish his second volume on Operative Veterinary Surgery. It is true that many excellent works on this subject have appeared during the last half century on the Continent of Europe, where veterinary medicine and surgery have been so nobly fostered by government aid and protection, but we have had no really comprehensive and reliable work in the English language. Dr. Fleming’s great experience and extended knowledge admirably fitted him for the task, as

the first volume results of the others who veterinary practical and p

Dr. Fleming to the practical teachings, and frequently practical orders and preparation which redound “Animal Pathology” “Veterinary more, and a forgetting his services to the too extended merely thought moment best

Sometimes little for any his works special political economy Fleming confessed, he might useful books, they would force and felt mind of the smoothing the never omitting expressions of nature, but to most favored ture, Dr. Fleming trusting that,

the first volume shows. Nor has he omitted to give us the best results of the French and German veterinary surgeons, or of any others who have contributed to this important department of veterinary practice, and all "based on exact anatomical, physiological and pathological teaching."

Dr. Fleming's work on Veterinary Obstetrics is indispensable to the practitioner, and to the public in the economic sense. Its teachings, as understood by the well informed veterinarian, frequently prevent extreme suffering and death in the higher orders and more valuable of the viviparous animals. The preparation of the work in question was another vast labor which redounds to the credit of our distinguished author. His "Animal Plagues," "The Contagious Diseases of Animals," "Veterinary and Sanitary Police," as well as quite a number more, and a vast number of papers contributed to periodicals, not forgetting his *Veterinary Journal*, all go to show his inestimable services to the healing art. But, as we all know, his writings are too extended and varied to admit of adequate mention here. I merely thought that glancing at some of them would for the moment best recall Dr. Fleming's good office in the profession.

Sometimes we meet with an eminent man who seems to care little for anything outside of his profession. Mr. Mill in one of his works speaks of such a man—one who knew nothing except political economy, and who necessarily knew that ill. Had Dr. Fleming confined his studies exclusively to the veterinary profession, he might have given the world a few crude, more or less useful books, but without general knowledge and literary culture they would have lacked scope, clearness, conciseness and that force and felicity of expression which enlighten and captivate the mind of the student. Thus he has lessened and lightened our labor, smoothing the paths in the broad fields of scientific research, never omitting to direct attention not merely to the more obvious expressions of the marvellous laws of animate and inanimate nature, but to those priceless secrets which she reveals only to the most favored of her children. Whether in science or in literature, Dr. Fleming is one of the few men it is safe for us to follow, trusting that, in after days, we may leave the profession still more

advanced than we found it. And, now, when the time has come for him to enjoy the victories of mature life, we are all hoping for his good health, happiness and length of days; and while thus hoping, we are delighted that the dimensions of his fame have extended from the confines of the British Isles to the circumference of civilization.

I now propose Dr. George Fleming for honorary membership in the Veterinary Medical Association of New Jersey. I shall not try to conceal the fact that I consider it a great privilege to have had the opportunity of paying even so trifling a tribute to our distinguished trans-Atlantic friend and colleague.

Dr. Fleming was unanimously elected amidst the most hearty expressions of kind feeling and prolonged applause.

REPORTS OF CASES.

A CASE OF TUBERCULOSIS.

By A. THOMPSON, Student.

On February 6th Dr. R. J. Michener, V.S., was called upon to prescribe for a thoroughbred shorthorn cow, ten years old, recently imported from Indiana, which the owner said had had a cough for about two weeks.

The cow grew no better, and Dr. Michener was called to see her on Feb. 18th. He then found her with the following symptoms, viz.; temperature, 103°; pulse, 70; respiration, 60; a loose rattling cough, and sonorous rale on both sides of the chest. Gave nitrate of potash and belladonna internally and applied a mustard plaster to the chest. The cow seemed to improve from this until the 2d of March, when she was again visited and all symptoms found to be less acute. The doctor visited her again on the 11th, and found all her symptoms worse. She grew rapidly worse until the 24th, when (being with calf), she aborted. Prior to this her appetite had been reasonably good, but from this on it almost entirely failed. She was visited by Dr. Michener again on the 31st, in company with Dr. R. P. Steddorn, D.V.M.S., who had been called in consultation. She was then much emaciated and

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showed the following symptoms: temperature, 103°; respiration, 50; pulse, 65; a loose cough accompanied by a discharge of mucus. On auscultation no sound was heard in lower portion of lung, and precussion showed dullness in the same region. The diagnosis of tuberculosis, formerly made by Dr. Michener, was confirmed and the owner advised to have the animal destroyed, which he consented to do. Accordingly, on April 9th, veterinary surgeons R. J. Michener, R. P. Steddorn, M.D., and Bruce Fisher, M.D., also myself, proceeded to the farm where the cow was kept, to destroy and hold a post mortem on same.

On examination, in addition to the above symptoms, a very marked friction murmur was heard over the region of the heart. After destroying the animal and removing one fore extremity in order to gain access to the chest, the abdominal walls were punctured and laid open, exposing the peritoneum, which was found to be excessively thickened and covered on the internal surface with very numerous tubercular deposits, with entire absence of abdominal fluid. The liver was found slightly congested, with possibly the process of fatty degeneration beginning to manifest itself. The kidneys and spleen were normal. In the thoracic cavity the pleural sacks were found slightly thickened in the lower portion, the pericardium much thickened and marked by tubercular deposits on the inner surface in the ventricular portion; this accounted for the friction murmur heard before death. The heart was normal. The lower third of each lung was filled by tuberculous deposits, infiltrated with mucopurulent matter. At the apex of each lung a large amount of broken down tissue was found. The upper portion of each lung was normal.

**LARGE LACERATED WOUNDS IN A COLT.—EXCELLENT EFFECTS
OF THE USE OF BROMO CHLORALUM.**

By J. ALBRIGHT, V.S.

On the 14th of March I was called to see an English draft yearling colt which had been gored by a shorthorn bull.

Condition.—I found an ugly looking wound, the colt being adverse to moving around, between the 9th rib, counting from behind

readily. During the evening her ill temper and perverse actions increased, and she endeavored to attack the man who had charge of her. The next day she became still more violent and dangerous, kicking and biting every one who approached her.

When seen by Mr. Minette, she presented the following symptoms: she was tied in her stall with two strong ropes; she still partook of her food, but was uneasy and nervous, and became excited by the slightest noise. She tried to kick with her fore feet whoever approached her. Her eye was widely distended and her looks threatening, her countenance had a peculiar contracting appearance resembling a kind of sardonic smile; when suddenly excited she would kick with both hind feet, but at times with one fore foot only. Unable to bite others, she turned on herself, biting her own chest and fore-arm. The feces are hard and dropped in small quantities, and micturation was painful, with the urine of a dark color. She continued to take her food, her deglutition became difficult, and there was dysphagia and prehension of liquids was impossible. She ground her teeth and tossed her head up and down, and her jaws were seized with convulsive movements. Respiration is accelerated and at times very loud. She already exhibited symptoms of weakness in her hinder parts.

From the history of the case there can be no doubt in the diagnosis. She had been bitten by a dog which had been killed three weeks before, on account of hydrophobia. The test of the presence of a dog brought near her proved most satisfactory. One that she knew, that belonged to the place, and had been, as it were, brought up with her was placed near her, so that she could easily see him, and at once she became furious, and tried to bite him.

Two shots in the region of the heart put an end to her sufferings.—*Recueil de Med. Vet.*

DEATH OF A PONY FROM STINGS OF VENOMOUS INSECTS.

By J. A. NUNN, A.V.D.

The following account of the death of a pony of mine from bees' stings may interest some of your readers. When out on

tour the other day, my camp, which was pitched near some trees, was attacked by bees, and a pony and two horses suffered severely from the stings they received—so severely in fact, that the pony died next evening, and the two horses are still unfit for work, though they were stung four days ago. The pony was stung very severely under the tail and about the abdomen, also, I think, on the tongue. One of the horses, who had in his plunging got rid of his blanket, was a mass of stings from his head to his tail, and the bone at the point of the hock—or rather the whole of the hind leg above the hock, to about the stifle—was so swollen that the animal could only move with difficulty at all. All three animals had to be led in six miles to my headquarters the day after they were stung, and the pony arrived very exhausted and apparently in great pain. I gave him a pint of beer, warm, which seemed to revive him a bit; but about 2 p.m., fever set in, when I gave or rather tried to give (for it could not be got down), a pint of beer, warm, with ginger in it; bedded him down well, and put on an extra blanket. At 3 p.m. the pony seemed no worse, but at the same time was no better—he had eaten nothing since he was first stung. About 6 p.m. the servants came and told me the pony was very bad, and when I got to him I found the poor little beast lying down apparently in great pain, and before anything could be done he died. When I reached the stables the last time, the pony seemed to be in great pain, and after one long spasm, lay down quietly and died.—*Pioneer*. (Deaths of equine patients from the stings of insects are sufficiently rare to warrant our insertion of this case. Treatment with ammonia locally and generally might have saved the patient.—Eds. Q. J.)—*Q. J. Vet. Sci. in India*.

RUPTURE OF THE CÆCUM IN CONSEQUENCE OF THE OPERATION OF CASTING.

BY MESSRS PICHENEY and SALONNE.

This case is recorded as an illustration of one of the various complications likely to follow the operation of casting.

A bay gelding, nine years of age, had a chronic swelling of the knee, which, having proved rebellious to the mild treatment of biniodide of mercury ointment, was to be fired over the affected

region. Having shown himself him down. V in similar cases struggling. A comparatively particular demon attributed to the ated on upon manner, and terminated, he some difficulty appeared manifest taken with mu the face was laceration of various alterations hours of suffering.

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region. Having during an attempt to operate while standing, shown himself dangerous in that position, it was decided to throw him down. Well prepared by the ordinary low diet prescribed in similar cases, he was cast without difficulty and with very little struggling. After first making some violent efforts, he remained comparatively quiet during the whole operation, making no particular demonstration except a loud groan or grunt, which was attributed to the pain inflicted by the cauterization. When operated on upon one side he was turned over, behaving in the same manner, and still groaning more or less loudly. The firing being terminated, he was allowed to get up, which he seemed to have some difficulty in doing. But when once on his feet, there appeared manifest symptoms of some very severe injury. He was taken with muscular twitchings, and showed signs of colic pains; the face was anxious, and the pulse thready or insensible. A laceration of some internal structure was suspected, and after various alterations of relief and relapse, the animal, after two hours of suffering, suddenly fell and died.

At the post mortem, on opening the abdominal cavity the entire intestinal mass seemed to partake of the lesions. They were all displaced, the cœcum being concealed by the intestinal circumvolutions, and the pelvic curvature of the large colon lying near the diaphragm. The cœcum, which was twisted upon itself and was strangulated by a fold of the small intestine, presented on its superior face a transversal rupture, being torn for some 8 or 10 centimeters, and perpendicularly to one of the re-enforcing bands of the superficial muscular layer of the organ. This laceration was evidently ante-mortem, as shown by the condition of its edges. The other organs of the abdomen presented lesions corresponding to that resulting from the injury to the cœcum, but were otherwise healthy.—*Rec. de Med. Vet.*

CRUSHING OF THE FOOT—CONTINUED IRRIGATION—RECOVERY.

BY M. BANDELOCHE.

The good effects which may be expected to follow the judicious application of the hydropathic treatment, are illustrated by this case.

The patient's left fore foot had been crushed by the wheel of

a heavy truck passing over the external coronary region of that member. Two wounds were the result of the accident. One, crescent shaped, extending from the heel to the toe, involved the large cartilage. The other corresponded to the quarter, and showed the perioplic band separated from the cutidura, the coronary groove, the perioplic bourrelet and the origin of the podophyllous tissue. The parts were congested and badly bruised, yet the animal showed relatively little lameness. The classic treatment, viz., the thinning of the wall, was indicated, but as this was about to be done, it occurred to the author to make trial of the application of cold water, as recently recommended by M. Harsteinsten. Continued irrigation of the wound was undertaken and continued for the space of ten days. During the first three days the lameness increased, but towards the fifth a notable improvement was observed, and on the eighth it was all gone. The superior wound became closed by degrees, the cicatrization progressed well, and in fifteen days the animal was returned to his work.—*Rec. de Med. Vet.*

AMERICAN VETERINARY COLLEGE. HOSPITAL RECORDS.

BY JAMES WALRATH, D.V.S., House Surgeon.

FRACTURE OF THE INTERNAL LIP OF THE TROCHLEA OF THE FEMUR.

The subject of this article is a chestnut mare used for saddle purposes. The history is rather incomplete, but as far as learned, being about as follows: She was found one morning cast in her stall, and after being assisted to rise was found lame on the off hind-leg. A practitioner was called, who diagnosed it stifle lameness, and ordered hot fomentations, which was kept up for some length of time, the animal in the meantime growing lamer and lamer, and the joint rapidly swelling, until fluctuation could be detected, when these abscesses broke and began discharging a thick bloody pus, now and then streaked with a yellowish fluid, similar to synovia.

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About three weeks after the accident, Dr. Liantard was called, and upon examination detected crepitation, but owing to the great swelling of the parts was unable to tell positively whether it proceeded from the friction of the paletta upon the femur, or from a true fracture, yet the latter was strongly suspected. The owner not wishing to have the animal destroyed, thought that he might be able to use her for breeding purposes, as she was quite valuable, and by advice had her sent to the college in an ambulance on March 25. She was immediately placed in slings, as she refused to bear even the slightest weight upon the affected limb. Here she would hang for hours at a time in a limp condition resting the now overworked leg. The treatment employed was simple, the parts being sponged with cold water several times a day to remove the discharge which poured down the leg, denuding it of hair and causing great irritation. Bed sores now made their appearance wherever any portion of the slings came in contact with the animal's body. Bodily temperature was normal, but appetite was capricious. The owner's consent was now sought in regard to her destruction as a worthless and incurable animal, and after some time was granted. She was accordingly destroyed on April 8.

Post-mortem appearances were as follows: On making an incision over the inferior extremity of the femur an abscess was struck containing nearly two quarts of laudable pus. Another was found situated deeper in the structure of the muscular tissue, and extending down to the articulation, and filled with pus similar to that discharged through the external openings, being of a "suppurative synovial" character. On a deeper incision the knife came in contact with fragments of bone, one of which, larger than the others, proved to be the internal lip of the trochlea of the femur. The roughened edges of the fractured portion, as well as the base of the trochlea, had been nearly removed by absorption. The appearances presented by the bones outside of the articulation was as follows: Provisional cicatrix extending all around the inferior extremity of the femur, and extending upwards about five inches, and downwards, involving the superior extremity of the tibia, especially the external and internal tube

rosities. The articular surface of the external facet of that bone was considerably ulcerated, and showed the absorbing process to be in an advanced state. The articulating surface of the patella was darkish in color and showed the same lesions, with considerable absorption and removal of the upper gliding face. The outside was covered by a porcelaineous deposit, which had considerably enlarged the superior portion, but was apparently only adherent to the external structure of the bone.

REMOVAL OF A LARGE MYXO-SARCOMA IN THE DOG—EXCELLENT RESULT OBTAINED BY THE USE OF COCAINE—RECOVERY.

BY THE SAME AND W. S. GOTTHEIL, M.D.

On the 22d of March a large pointer dog was brought to the college with a large tumor situated on the right thigh. It was moveable, apparently soft, and doughy to the feel. It covered the outside of the thigh, measuring several inches in length and in width, and had been growing for some time. Having decided to operate on him and remove the growth, five drops of a solution of cocaine were injected upon five points of the circumference of the tumor, and after waiting ten minutes the various steps of the operation were proceeded with. An insertion was made in the whole length of the tumor, measuring about ten inches in length, the skin dissected backwards and forwards and the enucleation begun. Its borders were well defined, being oval and quite regular. After carefully separating it from the muscles upon which the growth lay, it was found to be connected by a pedicle with a second tumor, smaller, laying between the biceps femoris and the vastus externus and extending down to the posterior face of the femur. This was also enucleated. After the complete removal, the wound was sewed up and antiseptic treatment applied. The outside growth weighed $1\frac{3}{4}$ lbs.; the inside, ten ounces. The operation lasted about thirty minutes and at no time of its duration did the dog manifest any pain. The local anesthesia produced by the cocaine was most excellent. The wound, however, proved rebellious to cicatrization. Quite a large piece of the skin sloughed away and at the time of writing quite a large portion of subcutaneous tissue is yet exposed and granulating.

The following nature of the tumor.

The tumor was lobulated and measured one 7x5x4 inches in appearance and the fibrous part firmer. There was rapid whitening of the rather abundant

A fresh specimen of straight interstices; a network of its meshes; a network are present in interstices, and therefore

Hardened appearance, but a network of cells in the gelatinous vessels are fairly some places the small round cells in many places the

Diagnosis.—marked; will present

The closing exercises held in Toronto, Ontario, in the Temperance Hall occupied the chair of Prof. Goldwin Smith. His remarks stated that the college. The President made addresses. Dr. George Alexander F. E. Andersons, C.

The following is the report made by Dr. Gottheil as to the nature of the tumor taken from the dog.

The tumor is very soft, in fact gelatinous, but is distinctly lobulated and encapsules. It is in two irregular parts, the larger one 7x5x4 inches, and the smaller, 4x4x3 inches. Its general appearance and consistency is that of boiled tapioca; but where the fibrous partitions divide off the subordinate capsules, is firmer. There are a few hæmorrhagic foci. Alcohol causes rapid whitening of the mass, and throws a white precipitate in the rather abundant fluid that can be squeezed out of it.

A fresh specimen showed under a moderate power a number of straight interlacing fibres with abundant transparent matter in its meshes; a number of nuclei, the cell outlines being indistinct, are present in it. At places there are collections of small round cells, and there are many minute vessels in the hyaline mass.

Hardened and stained sections showed the same general appearance, but also a moderate number of fusiform or branching cells in the gelatinous basement substance. These walled blood-vessels are fairly abundant, many of them have ruptured. In some places there is a small amount of fibrillar connective tissue. Small round cells infiltrate the mass in greater or less number; in many places these foci are large and closely packed masses.

Diagnosis.—Myxo-sarcoma gelatinosum, malignancy very marked; will probably return *in situ*.

COLLEGE CLOSING EXERCISES.

ONTARIO VETERINARY COLLEGE.

The closing exercises in connection with the Ontario Veterinary College were held in Toronto, on Friday morning, March 26, in one of the large board rooms in the Temperance Hall building. Dr. Andrew Smith, principal of the institution, occupied the chair, and with him on the platform were the Lieut.-Governor, Prof. Goldwin Smith, and other distinguished guests. Dr. Smith in his opening remarks stated that the past year had been the most successful in the history of the college. The Lieut.-Governor, Prof. Goldwin Smith and other gentlemen also made addresses. Diplomas were awarded as follows:

George Alexander, Strathroy, Ont.; G. H. Allen, Grand Rapids, Mich.; F. E. Andersons, Corey, O.; M. O. Anderson, Selkirk, Ont.; R. W. Ardary,

Pittsburgh, Pa.; E. A. Bergen, Chicago, Ill.; S. E. Boulter, Cheapside, Ont.; H. Bowles, Hancock, N. Y.; E. H. Bradley, Lansdowne, Ont.; G. C. Brock, Thamesville, Ont.; William H. Brown, Caledonia, Ont.; B. F. Butler, Sterling, Ont.; J. F. Butterfield, Montrose, Pa.; James Cannite, Consecon, Ont.; George S. Cavin, Burr, Ont.; E. W. Cheeseman, Corinth, Ont.; T. Connelly, Tonawanda, N. Y.; W. C. Daniels, Democracy, O.; A. V. Dun, Mansfield, O.; George W. Dickey, Forest, Ont.; H. E. Dilatush, Lebanon, O.; R. R. Dinwiddie, O.; J. S. Donald, Victoria, Ont.; W. L. Drinkwater, Alton, Ont.; Thomas Dunphy, Crosswill, Mich.; W. Everest, Altoona, Mich.; R. E. Folkes, Hillington, Lynn, Eng.; B. E. Friel, Stouffville, Ont.; D. Geddes, Bellgrave, Ont.; L. R. Grover, Bath, Pa.; R. J. Hall, Millbank, Ont.; J. W. Howard, Belleville, Ohio; Eugene B. Ingalls, Mohawk, N. Y.; S. Jones, Walsh, Ont.; F. A. Jones, Balsam, Ont.; J. F. Jones, Newark, Ohio; Wm. Joyce, Mansewood, Ont.; D. M. Keller, Williamsport, Pa.; A. H. King and J. E. King, St. Thomas, Ont.; Wm. Kirk, Gordonhill, Ont.; T. E. Macauley, Coldstream, Ont.; D. Maclean, Mitchell, Ont.; D. W. Mack, Ontario; H. S. Manhard, Brockville, Ont.; R. J. McCallister, Bailieboro', Ont.; T. C. McCahey, Wingham, Ont.; M. C. McClain, Jeromeville, O.; W. P. McClure, Brampton, Ont.; A. McDonald, Paisley, Ont.; Asa McQueen, Liverpool, N. Y.; E. Miller, Kings, Ill.; R. Parks, New York City; G. C. Pritchard, Greenville, Mich.; J. M. Ramsey, Mongolia, Ont.; A. J. A. Robillard, Ottawa, Ont.; Louis A. Robinson, Buffalo, N. Y.; George A. Scott, Parkhill, Ont.; John Scott, Alton, Ont.; J. J. Shoemaker, Bluffton, Ind.; John R. Litterly, Scranton, Pa.; Charles L. Smith, Brantford, Ont.; E. B. Smith, Toledo, O.; John Spencer, Brooklyn, Ont.; Wm. Standish, Owen Sound, Ont.; E. Harcourt, Stanley, Ottawa, Ont.; R. P. Steddom, Dayton, O.; Wellington T. Stewart, Harriston, Ont.; C. H. H. Sweetapple, Oshawa, Ont.; Hugh Thompson, Hornellsville, N. Y.; J. J. Toussaint, Milwaukee, Wis.; S. J. Wallace, Orangeville, Ont.; Adam Watson, Toronto, Ont.; H. S. Wende, Erin, N. Y.; M. P. Whitehead, Youngstown, O.; John Williams, Lima, O.; E. T. Williams, Stouffville, Ont.; Thomas Wilson, Wingham, Ont.

S. Schwartz, primary in *Materia Medica*; R. H. McNich, D. Bell, Geo. Baxter, A. C. Wolfe, primary in *Anatomy*.

The following were the prize winners in the senior class:

Pathology—Silver medal, G. W. Dickey; 2d prize, A. King; 3d, John Scott.

Anatomy—1st, G. W. Dickey; 2d, R. R. Dinwiddie; 3d, John Scott.

Entozoa—1st, R. R. Dinwiddie.

Microscopy—1st, F. E. Anderson.

Physiology—1st prize, R. R. Dinwiddie; 2d, W. McClure; 3d, J. S. Wallace.

Chemistry—1st, R. R. Dinwiddie; 2d, W. P. McClure.

Materia Medica—1st, F. Scott; 2d, G. W. Dickey; 3d, R. R. Dinwiddie.

Best general examination—1st gold medal, given by the Ontario Veterinary Medical Association, John Scott. Honors, J. E. Anderson, G. W. Dickey, R. R. Dinwiddie, A. King, W. Kirk, W. P. McClure, Asa McQueen, L. A. Robinson.

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MONTREAL VETERINARY COLLEGE.

The examinations of this institution, which have been in progress for the past two weeks, were concluded Tuesday, March 23.

Out of six final students four were awarded the diploma, viz: T. A. Wroughton, J. D. Wythe, C. C. Dyer and George Slaughter.

Sir William Dawson said that though the number of those receiving diplomas was not large, those who had received them might be congratulated on having gone through a very thorough course, for which they were greatly indebted to their instructors. It was a most fallacious method to judge a school by the number of its graduates. He hoped the time would come when, through Government aid, this school would cease to be a burden to its Principal.

Mr. Blackwood, representing the Quebec Council of Agriculture, said that he had occasion during the year to examine into the condition of the men who had been educated at this college, and he was gratified to learn that every one whom he had been able to trace had been successful. This was a remarkable record and an encouraging outlook to the men now leaving the college, to whom, as an old man, he might be allowed to give one or two bits of advice. Certain temptations peculiarly surrounded men of their profession. Let it be said of each of them, as he had once heard it remarked of their Principal, that no money could affect his opinion of a horse, and let them be careful about drink, which it would be hard for them to avoid. He had himself, in England, in 1836, come to the conclusion that his only safe course was to let it entirely alone, and he had not since departed from that position.

Mr. Billings, of Nebraska, one of the examiners, had one thing to add to what had just been said, and that was that if there was one thing worse than rum it was the horseman. The veterinary surgeon who had his office in a stable, and who spent his spare time talking horse slang and soiling the floor with his tobacco, degraded his profession. The man that courted his clients in this way would get the worst of it, while he who took the place where he belonged, at a respectable distance from them, would be respected by them and would get their money instead of their getting his. Mr. Billings ascribed to Dr. McEachran the very first place on the continent as a veterinarian educator, and denounced the diploma mills and cheap subscription societies that passed for colleges all over the continent. With the exception of four, such was the character of those in the United States. He hoped yet to give his friend here a tussle for the first place. The United States was going to be the first country with a State in it intelligent enough to see that if specialists forswear professional gain to give themselves to teaching and investigation the State should pay them. That State was Nebraska. It was original investigation which gave Rudolph Virchow the first place in their regard, and it was that which gave Dr. McEachran so high a place on this continent.

Dr. Hingston, in adding his quota of advice to the young men, said that it was their duty to take the position of gentlemen in society and to uphold the rank of their profession by their demeanor as well as by their requirements. He quoted some eminent examples of veterinary men who took the highest social places.

Dr. McEachran indorsed the advice which had been given, as well as what had been said of the success of the graduates. A number of those now held teaching positions, and although, from his own experience, he could not recommend this occupation to them as a money-making one, they could, at all events, assure themselves that those who had passed through the course required by this college were qualified to teach.

The proceedings were then brought to a close.

SOCIETY MEETINGS.

VETERINARY MEDICAL ASSOCIATION OF NEW JERSEY.

The second annual meeting of this Association was held in Morristown, Thursday, April 8, 1886. The President, Dr. W. E. B. Miller, occupied the chair, and called the meeting to order. A large number of members were present, also many gentlemen interested in the advancement of the veterinary profession.

The minutes of the last regular meeting, which was held at Camden on the 10th of December, 1885, were read by the Secretary and adopted.

The President then delivered his annual address, in which he congratulated the Association on the advancement it had made in its increase of membership. He paid a delicate tribute to the late Drs. A. P. Weeks and Wm. G. Schmidt. He made also excellent remarks on the present and future usefulness of the Association and the great advantages of combined over individual effort.

Matters of important general business relating to the running of the Association were then discussed, and amendments to the By-Laws were presented by the President.

A number of new members were then called for, after the report of the Board of Censors, recommending them, had been admitted.

Dr. Lowe spoke at some length of the defects of the present United States Army Veterinary Service, but owing to the pressure of business, resolutions which he wished to have passed were laid over for further consideration.

The Secretary then read a letter from Mr. George Fleming, of England, which led to remarks from Dr. Lowe, who proposed him as an honorary member of the Association. The gentleman was unanimously elected.

The questions of ethics and of a uniform rate of charges were then fully discussed.

At the election of officers the same Board as the one acting last year was re-elected.

Drs. Sattler, Latherman and Leis were appointed delegates to the United States Veterinary Medical Association, also to the New York State Veterinary Society, and the Pennsylvania State Veterinary Medical Association.

Drs. Dixon and Krowl were appointed essayists for the next regular meeting. The meeting then adjourned to meet at Long Branch, on the second Thursday of August next.

W. H. LOWE, D.V.S., *Secretary.*

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NEW YORK STATE VETERINARY SOCIETY.

The regular meeting of the Society was held on Tuesday, April 13, the President, R. W. Finlay, in the chair.

A large number of members present.

The minutes of the last meeting were read and adopted, with slight alterations.

Dr. Cattanaach read a paper on "Canine Distemper."*

On invitation Dr. Liautard opened the discussion by stating that the paper was one that treated of a subject that was of considerable interest, and the views of the essayist could hardly meet with much opposition. The treatment as laid down by him, was one that was generally followed by himself. He objected to dog shows, because they were a means of spreading the disease. If they were to be held, they ought certainly to be under the supervision of a qualified veterinarian, who, at the present day, was not placed at his proper value by those having charge of these dog exhibitions. The disease was an infectious one, and all dogs should be carefully examined before being allowed to enter any dog show; the eruption could be detected at once, as in measles, which he thought it very much resembled. He had noticed the eruption almost at the start, perhaps not plainly marked, but enough to be noticed. If it was true that it had a specific microbe, what was the microbe? In many cases he had seen St. Vitus dance follow. He had had good results follow the use of nit. silver.

In answer to Dr. Dixon, the essayist said he considered well bred dogs were more liable to the disease, but perhaps due to too good care.

Dr. J. S. Cattanaach said he thought that terriers, collies and hounds were more likely to take the disease. He thought, perhaps, if the breeds were crossed, it would add strength and so lessen the chances of getting distemper. Dr. R. A. McLean agreed with the idea of in-breeding being a means of increasing the dog's chance of having the disease. He said he considered that distemper resembled scarlatina more than measles.

The Chair took exception to this, stating that the eruption was entirely different in the two diseases, but agreeing that it was quite difficult to tell the two from each other for the first three or four days, but after that there was a well marked specific eruption. In answer to Dr. Field, the essayist said there was blindness, as there was opacity of the cornea and aqueous humor.

Dr. Dixon called attention to the fact that the mongrel, who was never taken to the dog shows, had distemper. It might be that domestication had considerable to do with the trouble.

Dr. Liautard asked if any experiments had been made as to the contagiousness of the disease.

Dr. R. A. McLean said a sister of his, seven years old, was taken sick with scarlatina, and a pet dog of hers was in her company all the time, not coming in contact with any other dog during the time, and had developed a well marked case of distemper.

*The crowded condition of this issue obliges us to postpone its publication to our next number.—[Ed.]

Dr. J. S. Cattanaeh said he had never seen a case of distemper where the eruption was not present, when in the early stage. He spoke of a puppy mastiff which on the first day of the show had paralysis, was taken away and treated for distemper and recovered. The fellow puppy remained, took the prize and distemper and died.

In answer to Dr. Johnson, the essayist said he considered that a dog once having distemper, might be liable to have it again, but it would be of a milder form.

Dr. Liautard said the case spoken of by Dr. McLean was interesting, and should be made public, as it might lead to some light thrown upon the subject, and perhaps enable us to drop the term distemper, and he would move that a committee be appointed for the purpose of investigating what relationship exists, if any, between the disease classed as distemper in dogs, scarlatina and measles, or any other disease analogous to it. The motion was seconded by Dr. Field and carried, the chair naming as such committee: Drs. Liautard, C. C. Cattanaeh, R. A. McLean and Dixon.

A vote of thanks being extended the essayist for his paper, and reports of committees being in order,—

Dr. Pendry, chairman of the Legislative Committee, reported that the bill had passed the Assembly by a large majority, and was on the order of third reading in the Senate. There had been more opposition in the Senate than he had expected, but he expected to win over the two or three Senators who seemed to object to the bill, in a few days. He had again been to Albany in company with Dr. Field, who had kindly offered to go if he could be of any help; he was glad to accept the offer, and the good help he had been able to give. While he was in Albany he had succeeded in getting the bill out of the Committee of the Whole and ordered to a third reading, without an amendment. He referred in high terms to the faithfulness with which the Hon. John T. Windolph had followed the bill, and of the valuable aid lend him by the Hon. Jacob Contor; and also to Senator Fagan for his address to the Senate on behalf of the bill. He expected to hear that the bill had passed in a very short time.

On motion, the report was received and the committee continued, and that the thanks of the Society be sent by the Secretary to the above named gentlemen.

Dr. Delessor, chairman of committee appointed to enquire as to place of meeting, reported that they could get a room at the Cooper Union for \$4.00 per night. The report was on motion, received.

Dr. Ogle moved, seconded by Dr. J. S. Cattanaeh, that the Society hold its meetings in the lecture room of the American Veterinary College.

In relation to the motion, Dr. Liautard said when the Society was first formed, in 1873, it held its meetings in the New York Veterinary College; and that after the second death the meetings were held in the American Veterinary College. The lecture room of that college was certainly not as highly furnished as the room they were in, but it seemed more appropriate, and they had been well treated there for nearly twelve years; he thought they might as well go back, as the Society seemed short of funds.

After some further remarks from others, as to the meetings held there being among the best, Dr. R. A. McLean moved as an amendment, seconded by Dr.

C. C. Cattanaeh, the Union, as reported

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C. C. Cattanaach, that the Secretary be instructed to engage a room at the Cooper Union, as reported by committee.

On the question being called, the amendment was put, and declared lost. Drs. R. A. McLean, C. C. Cattanaach and Delessier alone voted for it.

The original motion was put and carried, and afterward made unanimous on motion of Dr. R. A. McLean.

Dr. R. A. McLean proposed the names of John Foy, V.S.; John T. D. Donnelly, V.S.; John C. Shiffort, V.S., and Otto V. Lang, for membership, which were referred to the Board of Censors.

The Secretary read a letter from M. J. Tracy, M.R.C.V.S., Army Veterinarian, asking to have enclosed circulars, relating to the low standing of Army Veterinary Surgeons, endorsed by the Society and forwarded to Washington. After some discussion, during which it was stated that this had already been done and that the remedy was in their own hands by leaving the service if it was not agreeable, and thus letting the Government feel the loss of their services, the letter was ordered to be filed.

At the request of the chairman of Legislative Committee, Drs. R. W. Finlay, J. S. Cattanaach and S. S. Field were appointed to go with the committee to Albany, as a delegation to wait on the Governor to get his signature to the bill, if it should pass the Senate.

Dr. R. A. McLean being appointed essayist for next meeting, a motion to adjourn was carried.

W. H. PENDRY, D.V.S., *Secretary*.

CORRESPONDENCE.

VETERINARY EDUCATION.

CHILlicothe, OHIO, March 20, 1886.

Editor American Veterinary Review:

In the February number of your excellent journal there appeared an article, under the head of "Imperfect Veterinary Education—Is it traffic in Veterinary Diplomas?" and over the signature of James A. Waugh, V.S., Ontario.

Had Dr. W. not allowed his enthusiastic exuberance on the subject of veterinary education in America to lead him into unpardonable exaggerations and unnecessary and unbecoming personalities, we should have been happy to re-echo his sentiments and say amen to his prayers. He states that his "article was not written for the purpose of inciting any personal discussion, but merely to expose some practices which are inimical to the interests and welfare of veterinary science." If the motive which

actuated the production of that article is correctly expressed in the words we have just quoted, the writer of said article might have very wisely omitted from his otherwise meritorious production every one of the personal, impertinent, and irrelevant statements to which we shall presently refer.

He says: "It is needless to mention that one session was sufficient to gratify their (the students of 'said veterinary college') ambition to study in said veterinary college." In connection with the context this is for several reasons a most remarkable statement, but for none more than for its ambiguity. If Dr. W. means to state that diplomas are obtained at "said veterinary college" after only an attendance of one session, he makes an erroneous statement. If he means that students after attending one session go elsewhere to complete their course, he makes another; or if he means that the students of "said college" are deficient in ambition to become educated veterinarians, he makes a statement equally as remote from the truth. His words are capable of a diversity of interpretations, but, in view of what follows, we opine that the last one we have given them is probably the correct one; for he says: "Is it any wonder that some of the State veterinary medical associations do not hesitate to admit quacks and charlatans into membership in their respective associations, and even grant them certificates of membership as veterinary surgeons?" This, in the connection in which it is used, is beneath contempt. Why has Dr. W. not frankness enough to state what he apparently means, viz.: that the alumni of "said veterinary college" sympathize with "quacks and charlatans?" And again we have Dr. W. saying: "The majority of the regular graduates composing the body of the Ohio State Veterinary Medical Association are graduates of the same veterinary institution. Therefore the purport of that circular or letter, which Prof. Liantard received from them, and which was subsequently published in the *AMERICAN VETERINARY REVIEW*, was evidently intended as a mild rebuke to the "short cut" method of instruction as taught and practised in that veterinary college. However, there was no urgent necessity to offer it as an unpardonable insult to the other veterinary schools and colleges in the United States and Canada."

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The writer was present at the meeting of the said association when the important question of veterinary education was discussed, and unless we be very much mistaken, no "rebuke" in the sense intimated by Dr. W. was intended for any particular college, or the method of instruction practised at that college; and moreover, it is obvious from the manner in which that "circular, or letter," was received by "the other veterinary schools and colleges in the United States and Canada," that no insult was offered.

"The profession in Ohio," as Dr. Detmers says, "ranks with that of any other State," and its members are not so blissfully ignorant as to suppose that the "said veterinary college" is the only one that turns out graduates, some of whom are only partially educated. Their object was not to insult nor to rebuke, but was to expedite the consummation of a higher standard of veterinary education in America; for with them it is a perspicuous fact that in many of the colleges the so-called matriculatory examination is a farce and a disgrace; that the course of study is not only the "said veterinary college," but also in many others is entirely too brief, and that men are graduated from all of them who are a disgrace to our noble profession in more ways than one.

Let us be done with these foolish personalities and exert our utmost influence to persuade all the schools and colleges to adopt the suggestions offered by the Ohio State Veterinary Medical Association, not only in their "announcements," but in reality.

Yours very respectfully,

L. S. BUTLER, V.S.

OBITUARY.

T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.

This esteemed and well-known member of the medical profession, died on the 20th of March last. He was principally known to veterinarians as a lecturer to the Veterinary College of London, and for his excellent works on the Parasites of Domestic Animals.

(With the Author's Compliments.)

A HORSE'S TROUBLOUS LIFE.

A long-legged, guileless colt
 My mother brought me forth upon the Grampian hills;
 And as I gambolled round her day by day,
 In happy ignorance of the world outside,
 I recked not, cared not, thought not,
 Of the purposes to which in after life
 My equine form subservient should be made.
 A faultless head, arched neck, and shoulder sloped,
 Broad back and loins, with croup symmetrical;
 Tail well set on; deep chest and barrel round;
 Legs, arms, and thighs proportionately formed,
 The judges of the district did me pronounce—perfection.
 Oh! had my neck been ewed,
 My shoulder straight and legs deformed,
 A slave of me my master would have made,
 But kept me in my happy home, where all
 The troubles I have known in life could not have me o'erta'en.

Three brief years passed—the happiest of my life;
 Though, like the schoolboy, oft I chafed,
 And fancied I was hardly wrought and roughly checked;
 Yet, save the terror which I felt when jockey—dumb—
 Upon my back was placed, and iron bit secured
 Within my mouth—which terror me did cause
 To plunge and fight for freedom, e'en as the negro slave
 Doth try to break the cruel bonds from off his arms;
 Or as Leviathan, when by harpooner struck,
 Makes one wild dash, re-curves his mobile tail,
 And in his mighty wrath projects
 The sea in tiny spray great height above its level;
 Or as the elephant—the Mammoth of the forest—
 When, by the aid of his own species tamed,
 Man binds around his limbs the withes and cords
 (Which erst shall humble and subdue his rage),
 Makes energetic efforts to ensnare the strand
 And madly roars, and uproots with his proboscis
 The saplings whose misfortune 'tis near him to grow,—
 So I, with wild and frantic bounds and shrillest neighs,
 Did 'tempt my liberty to gain.
 But all my efforts did not me avail;
 And save conventional disease, as strangles,
 Colds, cuts, bruises, wounds,
 I knew not much of agony or pain; though by the "vet."
 I blistered was, for splent and shoulder-slip,
 And with the cruel shears my tail was—docked.

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A keen and grasping man,
My owner thought to hurry on my age,
And barbarously punched out the teeth
Which erst are termed, by men well versed
In matters scientific—deciduous.

Five years passed o'er—when, tempted
By large bribe, my master sold me to a firm
In Ednia's city fair; and then
My troubles 'gan in very earnest,
And thronged around my head in manner unsupportable.
I first was led to where a station stood,
And in a horse-box placed with others
As unsophisticated as myself.

I then was frightened by a scream—unearthly,
Devilish, as though poured out from throat
Of monster from the deep; and thence
Transported to my future home,
And placed, 'midst many others for the night,
In stable close and warm,

Where exhalations foul my lungs assailed.
And in the day in turn my work performed,
Though scared by rumble, roar and rattle
Of vehicles and shouts of men.

My breath thus poisoned in the night,
And in the day my nerves strung up to highest pitch,
I soon succumbed to cold and fever low;
And after weeks of suffering, my strength returned;
But, woe is me! I roarer was, as bad as ever paced the street.
And now chicanery was brought to bear
On my unlucky frame, by coper, who
Possession of me gained.

By means of tricks and dodges—as straps
Fixed round my nose, and careful turning
In the street when trotted—I was made
To cheat many honest and industrious yokels,
Who took a fancy to my noble form.

Ah me! it would be tedious to recount
The numerous tricks, so underhanded,
By which a gang of copers managed to relieve
The pockets of the innocents of their superfluous gold;
How, falling lame on one fore-foot,
In the other, *beaned* I was, to make
My action equal, and thus deceive the purchaser;
Then, failing in my wind, and made the
Subject of a chronic cough, time after time
I had forced down my throat, laudanum,
Chloroform, and lard and shot.

Next, in both fore-feet dead lame I fell,
 And my good master 'gan to think
 All hope of further gain was gone;
 But no! a scientific man called in, declared
 That I was suffering from navicular disease,
 And then most cleverly my nerves did cut;
 And thus deprived of pain and sense,
 I walked and trotted with freedom and with ease.
 And after giving time the wounds to heal,
 And on my body flesh and fat to put,
 I was in market-fair once more shown off,
 And once again became the means by which
 Unwary men were cruelly undone.

But even yet my troubles did not cease,
 For spavin large, developed in my hock,
 From which much agony and pain I did endure
 In spite of iron hot, of blister, and of punch.
 And after being punished thus without avail,
 My master most unmercifully did pound
 The skin, to make it swell, and thus the spavin hide;
 And that my action might be equalized,
 He further, on my other hock
 The same barbarity did perpetrate.

And now, with orbits puffed, with eyebrows
 Dyed, and bishoped teeth, I stand with
 Trembling limbs and knees o'erbowled,
 To wait the termination of my most unhappy fate,
 Bewailing man's inhumanity to us, the brute creation,
 Who, championless, are born to work, to suffer and to die.

—THOMAS WALLEY, *Principal Edinburgh Veterinary College.*
 (Reprinted from the "*Animal World*.")

NEWS AND SUNDRIES.

PASTEUR INSTITUTE.—An international institute named after Mr. Pasteur is to be erected in Paris at an estimate cost of 80,000 francs. The subscription list is open to the world at large, and will no doubt soon be covered.

NO PLEURO-PNEUMONIA IN KENTUCKY.—Dr. E. F. Hagyard, State Veterinarian of Kentucky, reports that State is now free from pleuro-pneumonia, and that with the assistance of Federal Veterinarian Dr. Wray 111 cattle were killed and buried and

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every sanitary measure was taken to insure the cattle of Kentucky from similar outbreaks in the future.

CIVIL SERVICE IN BROOKLYN.—The Civil Service officers of the city of Brooklyn have met with difficulties in the first attempt to carry on their duties. At the first examination of candidates for veterinarians to the fire department and board of health, one of the candidates was accused of having obtained possession of the questions before the proper time and to have thus been able to prepare himself for the race. He won it and was appointed.

CONNECTICUT STATE VETERINARY MEDICAL ASSOCIATION.—At the last meeting of the Connecticut Veterinary Medical Association, the following board of officers was elected: President, E. C. Ross; First Vice-President, E. A. McLellan; Second Vice-President, A. D. Sturges; Secretary, Thomas Bland; Treasurer, N. Tibbals; Censors, W. J. Sullivan, A. D. Sturges, A. L. Brown, E. A. McLellan, G. H. Parkinson.

NEW YORK COLLEGE OF VETERINARY SURGEONS.—The New York College of Veterinary Surgeons graduated the following at the close of their last session: Dr. George W. Gilbert, Baywood, L. I.; John J. Nay, N. Y.; J. I. D. Donnelly, Astoria, N. Y.; J. Thifford, Chambersburg, Pa.; Otto A. Van Long, Williamsburg, N. Y.; Fremont L. Russell, Fayette, Me.; J. A. Brickwell, M.D., N. Y.

GEORGE FLEMING.—The name of George Fleming is recommended as one of a body of commissioners to be formed in England to investigate Pasteur's method of inoculation for hydrophobia.

PROPOSED NEW VETERINARY COLLEGE.—At the recent meeting of the Board of Regents of the Nebraska State University steps were taken for the establishment of a College of Veterinary Science, and the plans adopted guarantee a school of the highest degree of efficiency. It is rumored that Dr. F. S. Billings is to take charge of the organization of the College and of the Faculty.

DR. HOPKINS, Territorial Veterinarian of Wyoming, went recently on a tour of professional investigation and has re-

turned to Cheyenne, his headquarters. He made a brief visit to Washington while East, but could learn of no new developments in connection with the contagious-disease-legislation at the capital.

INDUBITABLE CONGENITAL TUBERCULOSIS.—An eight months foetus was taken from a cow, the subject of advanced tuberculosis. The placenta and uterus were free from tuberculous lesions, but in the lower lobe of the right lung a nodule the size of a pea was detected, containing four caseous centres. The bronchial glands were congested and also tuberculous. The liver contained numerous grey granulations. Microscopically the tubercular structure was confirmed; masses of epithelioid cells with giant corpuscles containing tuberculoar bacilla were discovered.—*London Lancet.*

DR. PAAREN NO LONGER STATE VETERINARIAN.—In view of his very evident unfitness for the position of State Veterinarian, the general criticism of his course while holding that office, and the lack of harmony between him and the State Board of Live-Stock Commissioners, it has occasioned much surprise that Gov. Oglesby did not long ago remove Dr. Paaren. The reason assigned for this has been the difficulty in finding a man qualified for the work who would give up his regular practice. This seems a poor excuse for retaining an objectionable officer, for surely the great State of Illinois is able to employ competent men for any work to be done. Dr. John Casewell, of Chicago, recommended by the State Board of Live-Stock Commissioners for the place, has, it is stated, been appointed by the Governor.—*National Live-Stock Journal.*

EXCHANGES, ETC., RECEIVED.

Besides our list of home and foreign exchanges received, with a number of pamphlets and reports of Agricultural Boards, we acknowledge communications from J. C. Meyer, Sr., V.S.; W. H. Lowe, D.V.S.; A. Thompson; J. Walrath, D.V.S.; J. Albright, V.S.; D. J. Dixon, D.V.S.; W. Pendry, D.V.S.; L. S. Butler, V.S.; W. S. Gottheil, M.D. and Dr. Wehenkel.

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